Massachusetts Department of Public Health
Massachusetts Immunization Program (MIP)

MODEL STANDING ORDERS

Inactivated Influenza Vaccine

Trivalent Types A and B

These model standing orders are current as of September 2006. They should be reviewed carefully against the most current recommendations and may be revised by the clinician signing them.

Inactivated Influenza Vaccine is specifically indicated for people in the following groups:

I. Persons at Increased Risk for Influenza-Related Complications:

1. All children 6 – 59 months of age.
2. All persons ≥ 50 years of age.
3. Persons 6 months - 18 years of age who are receiving long-term aspirin therapy.
4. Women who will be pregnant during influenza season.
5. Persons ≥ 6 months of age who:
   - Have chronic cardiovascular or pulmonary conditions, including asthma.
   - Have required regular medical follow-up or hospitalization during the preceding year due to chronic metabolic diseases (including diabetes), renal dysfunction, hemoglobinopathies, or immunodeficiency (including immunodeficiency caused by medications or HIV).
   - Have any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk of aspiration.
6. Residents of long-term care facilities that house persons of any age with chronic medical conditions.

II. Persons Who Can Transmit Influenza to Persons at High Risk:

1. Personnel in both hospital and outpatient settings, including emergency response workers.
2. Employees of long-term care facilities who have contact with patients or residents.
3. Employees at assisted living and other residences for persons in high-risk groups.
4. Persons who provide home care to persons in high-risk groups.
5. Household contacts (including children) of persons in high-risk groups.
6. Household contacts and out-of-home caretakers of children 0 - 59 months of age.

III. General Population, depending on vaccine availability:

1. Persons who provide essential community services.
2. Students and other persons in institutional settings (e.g., dormitories).
3. Certain travelers.
4. Anyone who wishes to reduce the likelihood of becoming ill with influenza or transmitting influenza to others should they become infected.

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Clinician's Signature Date

Inactivated Influenza Vaccine Order

ORDER:

1. Provide patient, parent or legal representative with a copy of the Vaccine Information Statement (VIS) and answer any questions. VIS's in English and other languages are available from the MIP and online at http://www.immunize.org/vis.
2. Screen for contraindications according to Table 1.
3. Administer influenza vaccine intramuscularly (IM), according to the recommended age-specific dose and schedule (Table 2). Administer IM vaccines at a 90^0 angle with 22-25-gauge needle. **Always check the package insert prior to administration of any vaccine.**
   a. For infants 6 - 12 months of age, administer into the anterolateral aspect of the thigh with a 7/8- to 1-inch needle.
   b. For children ≥ 12 months – 18 years of age, administer in the deltoid muscle, using a 7/8- to 1¼- inch needle. For toddlers, you can use the anterolateral thigh, but the needle should be longer, usually 1 inch.
   c. For adults > 18 years of age, administer in the deltoid muscle with a 1- to 2 -inch needle.

   Note: See Table 3 for approved inactivated influenza vaccines for different age groups.
4. Administer influenza vaccine simultaneously with all other vaccines indicated.
5. If possible, observe patient for an allergic reaction for 15 - 20 minutes after administering vaccine.
6. Facilities and personnel should be available for treating immediate hypersensitivity reactions.
7. Report clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) at 1-800-822-7967 or http://www.vaers.hhs.gov/.
8. See the MIP document *General Protocols for Standing Orders* for further recommendations and requirements regarding vaccine administration, documentation and consent.

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Clinician's Signature Date

Inactivated Influenza Vaccine Orders

Table 1. Contraindications and Precautions to Inactivated Influenza Vaccine

Valid Contraindications for Inactivated Influenza Vaccine	Invalid Contraindications (Give Inactivated Influenza Vaccine)
Anaphylactic reaction to a previous dose of influenza vaccine; chicken eggs or any other component of the vaccine (see package insert for specific components)[1]	Mild illness with or without fever
	Non-anaphylactic allergy to any component of the vaccine
Precaution to influenza vaccine:	HIV infection[3]
Acute moderate or severe illness with or without fever (temporary precaution).	Pregnancy[4] or breast feeding
Guillain-Barré syndrome (GBS) $\leq$ 6 weeks of receiving a dose of influenza vaccine[2]	Treatment with warfarin (coumadin), theophylline, phenytoin, or aminophylline[5]
Anaphylactic reaction to latex: Some influenza vaccine products contain latex in the stopper, while others do not. Check the package insert specific to the product you are using. (Note: All presentations of Fluzone® vaccine are latex-free.)	Anticoagulation or bleeding disorder[6]

[1] Refer persons with a history of anaphylaxis to a vaccine component, but who are at risk for complications from influenza, to their health care provider for evaluation, desensitization and possible administration of influenza vaccine. Protocols have been developed for safely administering influenza vaccine to persons with egg allergies.

[2] Avoiding flu vaccine in patients who have experienced Guillain-Barré syndrome (GBS) $\leq$ 6 weeks post-vaccination **and** who are not at high risk for severe influenza complications is prudent. For most persons with a history of GBS and who are at high risk for severe complications from influenza, the established benefits of influenza vaccine justify yearly vaccination.

[3] Because influenza can result in serious illness*, vaccination will benefit many HIV-infected patients, including HIV-infected pregnant women*. Vaccine may not induce protective antibodies in patients with advanced disease. A second dose during the same flu season *does not* improve immune response in these patients.

[4] Pregnant women have an increased risk for hospitalization due to complications from influenza. No adverse fetal effects have been associated with influenza vaccine. **Influenza vaccine can administered in any trimester**.

[5] Although flu vaccine can inhibit the clearance of warfarin, theophylline, phenytoin, and aminophylline, studies show no adverse clinical effects. High-risk patients who take these medications *should* receive flu vaccine.

[6] Minimize the risk of bleeding after an IM injection in these patients by administering the vaccine immediately after the patient's receipt of replacement factor. Use a 23-guage (or smaller) needle and immediately apply direct pressure to the vaccination site for $\geq$ 2 minutes.

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Clinician's Signature Date

Table 2. Inactivated influenza vaccine dosage, by age group - United States

Age Group	Dose	No. of Doses
6 – 35 months	0.25 mL	1 or 2[1]
3 – 8 years	0.5 mL	1 or 2[1]
≥ 9 years	0.5 mL	1

[1]Children < 9 years of age who are receiving influenza vaccine for the first time should receive 2 doses, ≥ 1 month apart. Administer the 2nd dose before December, if possible. If a child aged < 9 years receives a dose of influenza vaccine for the first time and does not receive a second dose within the same season, administer only 1 dose of vaccine the following season.

Table 3. Approved inactivated influenza vaccines for different age groups

Trade Name	Manufacturer	Dose/ Presentation	Thimerosal Content (mcg Hg/0.5 mL dose)	Age Group
Fluzone®	sanofi pasteur	0.25 mL prefilled syringe 0.5 mL prefilled syringe 0.5 mL vial 5.0 mL multidose vial	0 0 0 25	6 – 35 mos ≥ 36 mos ≥ 36 mos ≥ 6 mos
Fluvirin™	Novartis (formerly Chiron)	0.5 mL prefilled syringe 5.0 multidose vial	< 1.0 24.5	≥ 4 yrs ≥ 4 yrs
FLURIX™	GlaxoSmithKline	0.5 ml prefilled syringe	< 1.0	≥ 18 yrs

Note: Another inactivated influenza vaccine may become licensed during the 2006 – 2007 influenza season. Please check the package insert for the age groups for which it is licensed.

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Clinician's Signature Date